

# PROGRAMMABLE DOOR-BELL WITH FLASHING LEDS

**I**C1 (NE555) is used here as a clock generator. It is configured as an astable multivibrator whose frequency can be adjusted with the help of potmeter VR1. The clock pulses obtained from IC1 are fed to pin 14 of IC2 (CD4017) which is a well-known decade counter.

Here LEDs have been connected in a rather unusual way. The LEDs flash sequentially from Q0 to Q9. Five presets

of 100k each are connected to each pair of LEDs.

IC3 here works as tune generator and the Darlington pair comprising transistors BC547B and SL100B is used to amplify its output. The frequency of IC3 is adjusted by potmeter VR2. Each 100k preset (VR3 through VR7) is adjusted for a different tune depending on individual choice. The 10-LED display

is assembled in such a way that the first vertical column has orange LED1 through LED5 and the second parallel column has green LED10 through LED6, as shown in the figure.

The circuit can be easily assembled on a veroboard. Any well-filtered 9V, 250mA DC power supply is suitable. Primary of the supply transformer may be connected to the bell AC outlet points.

